

**CHANNEL MONITORING AND IDENTIFICATION AND PERFORMANCE  
MONITORING IN A FLEXIBLE HIGH SPEED SIGNAL PROCESSOR  
ENGINE**

5

**ABSTRACT**

Systems and methods are disclosed to provide channel  
monitoring and/or performance monitoring for a  
communication channel. For example, in accordance with  
10 an embodiment of the present invention, an equalizer is  
disclosed that equalizes for channel distortions and also  
provides channel and performance monitoring information,  
such as for example bandwidth estimation, channel  
identification, signal-to-noise ratio, chromatic  
15 dispersion, and/or polarization-mode dispersion.